



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,582	09/18/2000	John J. Horton	BSOO-149	4716
28970	7590	05/06/2004	EXAMINER	
SHAW PITTMAN IP GROUP 1650 TYSONS BOULEVARD SUITE 1300 MCLEAN, VA 22102			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2662	
DATE MAILED: 05/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/665,582	HORTON, JOHN J.	
	Examiner Hanh Nguyen	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Amendment filed on 03/31/04.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-35 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Objections

Claim 27 is objected to because of the following informalities:

In claim 27, “**SLAM**” on line 7 should be changed to **DSLAM** for consistency with DSL Access Multiplexer. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 5, 6, 8, 9 are rejected under 35 USC 102(e) as being anticipated by **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claim 1, **Kaffine et al.** discloses a subscriber with attached Internet diagnostic unit (IDU)(see Fig.2, col.7, lines 1-5) repeatedly transmits a PING request toward router 119, core

network (backbone) and Internet 24 (see Fig.1) (see Fig.10, at stages 248 & 256), and waits for an expected reply packet in response to the PING (periodically sending from at least one user computer a request via a router to which a response is expected). See col.14, lines 17-23 & 55-56. At stage 250, a determination is made if the reply has been received by checking a predetermined time-out period (determining if the response is received). See col.14, lines 22-25. If at the time-out period and the response has not been received, the destination is determined not currently reachable (a notification message to the user indicating network access is unavailable when no response is received). See col.14, lines 25-26.

In claim 2, **Kaffine et al.** discloses the PING request (PING command). See col.14, lines 17-24.

In claim 5, **Kaffine et al.** discloses, in Fig.10, a response message sent to user is displayed in window 267 (displaying a notification message comprising a pop-up window). See col.15, lines 1-10.

In claim 6, **Kaffine et al.** discloses the invention provides computer program instructions installed in computers (implementing computer software in user computer). See col.3, lines 8-15. One example is hardware with associated software programs with instructions to perform functions to determine problems in network 10. See col.6, lines 58-62.

In claim 8, **Kaffine et al.** discloses, in Fig.10, user 140 receives an email at window 267 indicating that network problem has been resolved (displaying a notification message indicating that network access has been restored). See col.15, lines 5-10.

In claim 9, **Kaffine et al.** discloses, in Fig.1, user computers access via Internet 24 (network is the internet). See col.6, lines 15-20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Booth, III et al.** (US pat. No. 6,668,282 B1).

In claim 3, **Kaffine et al.** discloses, in Fig.10, the PING request with IP address is repeatedly sent at stage 248 via Internet 24. (See col.14, lines 17-20 &55-57). Even though the destination IP address is not explicitly specified in the IP address of **Kaffine et al.**, but the structure of IP address implies a destination IP address must be included therein. In order to further support the destination IP address included in IP address, examiner directs to **Booth, II et al.** which discloses, in Fig.4, that a PING request sent from device A to device B comprising destination IP address (IP address is used as a destination address for a PING command). See col.8, lines 45-50. Therefore, it would have been obvious to one ordinary skill in the art that sending a PING command from user computer in **Kaffine et al.** via Internet to a destination comprises destination IP address & source IP address (ping command comprising Ip address).

Claim 4 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claim 4, examiner would like to point out that According to the specification , page 7, lines 5-10, the secondary IP address is “PINGed” when no response from the previous PING with first Ip address is received. The purpose of sending secondary Ip address is to ascertain that the Internet is indeed down, not just the first or the second Ip address that is not responding.

Kaffine et al. discloses the PING request with IP address is repeatedly sent at stage 248 via Internet 24 to destination (See col.14, lines 17-20 &55-57). Even though the PING request does not comprises one of a primary IP address and a secondary IP address used in conjunction with the PING command. It is a well-known in the art that every time a PING request is sent via Internet, a temporary IP address is assigned to the PING command for establishing a connection until the connection is terminated, then the temporary IP address is released. The temporary Ip address assigned to the PING command may be a first address (primary address) if the PING command is first transmitted; or a second address (secondary address) for a next PING command. Therefore, it would have been obvious to one skill in the art to repeatedly send the PING command in **Kaffine et al.** which includes first Ip address, second Ip address. The motivation is to ascertain that the Internet is indeed down.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Southgate** (US pat. No. 6,205,579 B1).

In claim 7, **Kaffine et al.** does not disclose the software is downloaded from the Internet. **Southgate** discloses, in fig.3, step 314, a user accesses Internet to download a new version of software to upgrade his computer ‘s current software (download the software from the Internet). See col.6, lines 40-50. Therefore, it would have been obvious to one ordinary skill in the art to

implement the method by which the user computer's software is upgraded from internet into **Kaffine et al.** so that the use computer can download newer version of software from Internet, thereby avoiding the use of floppy disks or CD ROMs to download. In addition, by downloading software from Internet, the Ip address used in transmitting the PING command is easily changed by the requesting users.

Claims 10, 15, 16, 27, 29, 32, 33 are rejected under 35 USC 102(e) as being anticipated by **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claims 10 and 27, **Kaffine et al.** discloses, in Fig.1, a network 10 having a user home 12 comprising a plurality of user computers 28, 38, 46 and 52 (a network having a plurality of user computers). See col.5, lines 22-45. The user PC 52 transmits data over DSL line 58, DSLAM 68, router 64 to an Internet 24 (DSL carrying data from at least one user computer via DSL, DSLAM , router over Internet). See col.5, lines 19-21 & 34-37 & 45-57. Telephone 56 transmits voice through DSL 58 (DSL carrying voice signals from a telephone). See col.5, lines 34-37. Refer to Fig.10, at stages 248 & 256, a user 140 with an attached Internet diagnostic unit (IDU) (see col.7, lines 1-5), repeatedly transmits a PING request toward the DSLAM 68, router 64, Internet 24 (see Fig.1, col.5, lines 44-55) and waits for an expected reply packet in response to the PING (periodically sending from at least one user computer towards a DSLAM a request via a router to which a response is expected). See col.14, lines 17-23 & 55-56. At stage 250, the reply is determined if it has been received at the subscriber by checking at a predetermined time-out period (determining if the response is received). See col.14, lines 22-25. If at the time-out period and the response has not been received, the destination is determined not currently

reachable (a first notification message to the user when no response is received). See col.14, lines 25-26. The response is received at stage 258 and is displayed at user window 267 on the user 140 (displaying a second notification message on the use computer when the response is received). See col.14, lines 59 - 67 & col.15, lines 1-7.

In claim 15 and 32, **Kaffine et al.** discloses, in Fig.10, a response message sent to user is displayed in window 267 (displaying a notification message comprising a pop-up window). See col.15, lines 1-10.

In claim 29, **Kaffine et al.** discloses the PING request (PING command). See col.14, lines 17-24.

In claims 16 and 33, **Kaffine et al.** discloses the invention provides computer program instructions installed in computers (implementing computer software in user computer). See col.3, lines 8-15. One example is hardware with associated software programs with instructions to perform functions to determine problems in network 10. See col.6, lines 58-62.

Claims 11, 12 , 28 are rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claim 11, **Kaffine et al.** discloses, in Fig.10, at stages 248 & 256, a user 140 repeatedly transmits a PING request toward server 22(see Fig.1) (periodically sending from at least one user computer a request). See col.14, lines 17-23. **Kaffine et al.** does not disclose the request is sent every 5-10 minutes. It is a well-known skill in the art to set a period between subsequent requests depends on how often the IP traffic is congested. For example, if the user 's IP traffic is less congested (mostly reachable), the request can be sent every 5 or 10 minutes. If the user's IP traffic is often congested (mostly unreachable), the request is sent every 1 or 2 minutes.

Therefore, it would have been obvious to one ordinary skill in the art to send the request in the system of **Kaffine et al.** every 5 or 10 minutes in order to monitor the connectivity of IP traffic through routers. Another purpose is to keep the router in operation status by repeatedly sending requests from the users.

In claim 12, **Kaffine et al.** discloses the PING request (PING command). See col.14, lines 17-24.

In claim 28, **Kaffine et al.** discloses, in Fig.10, at stages 248 & 256, a user 140 repeatedly transmits a PING request toward server 22(see Fig.1) (periodically sending from at least one user computer a request). See col.14, lines 17-23. **Kaffine et al.** does not disclose the request is sent every 5-10 minutes. It is a well-known skill in the art to set a period between subsequent requests depends on how often the IP traffic is congested. For example, if the user 's IP traffic is less congested (mostly reachable), the request can be sent every 5 or 10 minutes. If the user's IP traffic is often congested (mostly unreachable), the request is sent every 1 or 2 minutes. Therefore, it would have been obvious to one ordinary skill in the art to send the request in the system of **Kaffine et al.** every 5 or 10 minutes in order to monitor the connectivity of IP traffic through routers. Another purpose is to keep the router in operation status by repeatedly sending requests from the users.

Claims 13, 30 are rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Booth, III et al.** (US pat. No. 6,668,282 B1).

In claims 13 and 30, **Kaffine et al.** discloses the PING request with IP address is repeatedly sent at stage 248 via Internet 24. Even though **Kaffine et al.** does not explicitly disclose the

destination IP address is specified in the IP address, but the structure of IP address as understood in the art including a source IP address as well as destination IP address therein. In order to further support the destination IP address included in IP address, examiner directs to **Booth, II et al.** which discloses, in Fig.4, that a PING request sent from device A to device B comprising destination IP address (IP address is used as a destination address for a PING command). See col.8, lines 45-50. Therefore, it would have been obvious to one ordinary skill in the art that sending a PING command from user computer in **Kaffine et al.** via Internet to a destination comprises destination IP address & source IP address (ping command comprising Ip address).

Claim 19 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Southgate** (US pat. No. 6,205,579 B1).

In claim 19, **Kaffine et al.** does not disclose the software is downloaded from the Internet. **Southgate** discloses, in fig.3, step 314, a user accesses Internet to download a new version of software to upgrade his computer 's current software (download the software from the Internet). See col.6, lines 40-50. Therefore, it would have been obvious to one ordinary skill in the art to implement the method by which the user computer's software is upgraded from internet into **Kaffine et al.** so that the use computer can download newer version of software from Internet, thereby avoiding the use of floppy disks or CD ROMs to download. In addition, by downloading software from Internet, the Ip address used in transmitting the PING command is easily changed by the requesting users.

Claims 14 and 31 are rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claims 14 and 31, examiner would like to point out that According to the specification , page 7, lines 5-10, the secondary IP address is “PINGed” when no response from the previous PING with first Ip address is received. The purpose of sending secondary Ip address is to ascertain that the Internet is indeed down, not just the first or the second Ip address that is not responding.

Kaffine et al. discloses the PING request with IP address is repeatedly sent at stage 248 via Internet 24 to destination (See col.14, lines 17-20 &55-57). Even though the PING request does not comprises one of a primary IP address and a secondary IP address used in conjunction with the PING command. It is a well-known in the art that every time a PING request is sent via Internet, a temporary IP address is assigned to the PING command for establishing a connection until the connection is terminated, then the temporary IP address is released. The temporary Ip address assigned to the PING command may be a first address (primary address) if the PING command is first transmitted; or a second address (secondary address) for a next PING command. Therefore, it would have been obvious to one skill in the art to repeatedly send the PING command in **Kaffine et al.** which includes first Ip address, second Ip address. The motivation is to ascertain that the Internet is indeed down.

Claims 17, 18, 34 and 35 are rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Welder** (US pat. No. 6,622,179 B2).

In claims 17 and 34, According to the specification, page 4, line 6, the multi-tasking operating system is described as windows 2000, Unix or Linux. Therefore, examiner equates the multi-tasking computer operating system as Unix or Linux. **Kaffine et al.** does not disclose computer software is operable within a multi-tasking computer system. **Welder** discloses the computer 100 using operating system comprising Unix, Linux, Windows 95, 98, NT, etc. (computer software is operable within a multi-tasking computer system). See col.7, lines 7-18. Therefore, it would have been obvious to one ordinary skill in the art for the user computer in **Kaffine et al.** to use any of the operating systems comprising Unix, Linux, Windows 95, 98, NT, etc. The reason is that operating system of a computer comprises a set of soft ware programs that perform tasks desired by a user.

In claims 18 and 35, **Kaffine et al.** does not disclose the computer software, firmware is automatically launched when the computer is booted. **Welder** discloses, in Fig.3, when a computer 100 is powered on, user computer 100 uses icons to automatically launch preinstalled programs (computer software is automatically launched when the computer is booted). See col.8, lines 17-20 & lines 57-65. Therefore, it would have been obvious to one ordinary skill in the art to implement the method of launching preinstalled program into **Kaffine et al.** by preinstalling testing programs in user computer so that when the user computer is first booted, the loaded programs is automatically launched to perform the testing for network connectivity.

Claims 20, 21, 23 are rejected under 35 USC 102(e) as being anticipated by **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claim 20, **Kaffine et al.** discloses a subscriber with attached Internet diagnostic unit (IDU)(see col.7, lines 1-5) repeatedly transmits a PING request toward router 64, Internet 24 (see Fig.1) (see Fig.10, at stages 248 & 256), and waits for an expected reply packet in response to the PING (periodically pinging from a user computer a request via a router, a network). See col.14, lines 17-23 & 55-56 & col.6, lines 15-22. At stage 250, a determination is made if the reply has been received by checking a predetermined time-out period (determining if the response is received). See col.14, lines 22-25. If at the time-out period and the response has not been received, the destination is determined not currently reachable (a first message to the user indicating network access is unavailable when no response is received). See col.14, lines 25-26. Still refer to Fig.10, an email is displayed on window 267 of the subscriber to indicate that network problem has been resolved (displaying a second message indicating that user network access has been restored). See col.15, lines 5-10.

In claim 21, **Kaffine et al.** discloses a subscriber with attached Internet diagnostic unit (IDU)(see col.7, lines 1-5) repeatedly transmits a PING request toward router 64, Internet 24 (see Fig.1) (see Fig.10, at stages 248 & 256), and waits for an expected reply packet in response to the PING (periodically pinging from a user computer a request via a router, a network). See col.14, lines 17-23 & 55-56 & col.6, lines 15-22.

In claim 23, **Kaffine et al.** discloses the invention provides computer program instructions installed in computers (implementing computer software in user computer). See col.3, lines 8-15. One example is hardware with associated software programs instructions which perform functions to determine problems in network 10. See col.6, lines 58-62.

Claim 24 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Southgate** (US pat. No. 6,205,579 B1).

In claim 24, **Kaffine et al.** does not disclose the software is downloaded from the Internet. **Southgate** discloses, in fig.3, step 314, a user accesses Internet to download a new version of software to upgrade his computer 's current software (download the software from the Internet). See col.6, lines 40-50. Therefore, it would have been obvious to one ordinary skill in the art to implement the method by which the user computer's software is upgraded from internet into **Kaffine et al.** so that the use computer can download newer version of software from Internet, thereby avoiding the use of floppy disks or CD ROMs to download. In addition, by downloading software from Internet, the Ip address used in transmitting the PING command is easily changed by the requesting users.

Claims 25 and 26 are rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1) in view of **Welder** (US pat. No. 6,622,179 B2).

In claim 25, **Kaffine et al.** does not disclose the computer software, firmware is automatically launched when the computer is booted. **Welder** discloses, in Fig.3, when a computer 100 is powered on, user computer 100 uses icons to automatically launch preinstalled programs (computer software is automatically launched when the computer is booted). See col.8, lines 17-20 & lines 57-65. Therefore, it would have been obvious to one ordinary skill in the art to implement the method of launching preinstalled program into **Kaffine et al.** by preinstalling testing programs in user computer so that when the user computer is first booted, the loaded programs is automatically launched to perform the testing for network connectivity.

In claim 26, According to the specification, page 4, line 6, the multi-tasking operating system is described as windows 2000, Unix or Linux. Therefore, examiner equates the multi-tasking computer operating system as Unix or Linux. **Kaffine et al.** does not disclose computer software is operable within a multi-tasking computer system. **Welder** discloses the computer 100 using operating system comprising Unix, Linux, Windows 95, 98, NT, etc. (computer software is operable within a multi-tasking computer system). See col.7, lines 7-18. Therefore, it would have been obvious to one ordinary skill in the art for the user computer in **Kaffine et al.** to use any of the operating systems comprising Unix, Linux, Windows 95, 98, NT, etc. The reason is that operating system of a computer comprises a set of soft ware programs that perform tasks desired by a user.

Claim 22 is rejected under 35 USC 103(a) as being unpatentable over **Kaffine et al.** (US Pat. No. 6,654,914 B1).

In claim 22, **Kaffine et al.** does not explicitly disclose that repeatedly pings keep the router from entering a lockup state. But **Kaffine et al.** explicitly discloses that the PINGing is repeatedly transmitted from user 52 via routers 64, 80, 84 to Internet 24 (see Fig.1, col.14, lines 17-22, lines 55-57). Therefore, it is implied in **Kaffine et al.** that constantly PINGing via routers obviously keep them from being disable because even when the network connection fails, PING commands still are sent via routers in order to detect the network problem.

Response to Arguments

Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Badt et al. (US Pat. No. 5,959,974) discloses System and Method for Discovering Path MTU of Internet Paths.

Chao et al. (US pat. No. 5,964,837) discloses Computer Network management Using Dynamic Switching Between Event-Driven and Polling Type of Monitoring from Manager Station.

Kanamaru et al. (US Pat. No. 6,574,197 B1) discloses Network Monitoring Device.

Tosey et al. (US pat. No. 6,392,990 B1) discloses Method for Implementing Interface Redundancy in a Computer network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 703 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen



A handwritten signature in black ink, appearing to read "H. Nguyen".

April 28, 2004